

REMARKS

1. Applicants wish to thank the Examiner for withdrawing the rejections under 35 U.S.C. 112, second paragraph, 35 U.S.C. 102(b) and the judicially created doctrine of obviousness-type double patenting.

2. Claim 1 has been amended to recite “for a duration of at least 0.5 hours and up to 150 hours” based on original claim 10 and page 11, lines 14-17 of the application text. Claim 10 has been canceled since it has been incorporated into Claim 1.

3. Claims 1-25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hayden et al (U.S. Patent No. 4,007,135 (hereinafter the ‘135 reference)). This rejection is respectfully traversed. Applicants’ adhere to the remarks/arguments made in the prior Amendment, dated June 9, 2005, and those remarks/arguments are hereby incorporated by reference. The following paragraphs are intended to further elaborate on the remarks/arguments already given.

Applicants’ claimed method in the present application relates to a supported highly selective epoxidation catalyst comprising silver in a quantity of at most 0.17 g per m² surface area of the support and further comprising one or more selectivity enhancing dopants selected from rhenium, molybdenum and tungsten. The catalyst, or a precursor of the catalyst containing silver in cationic form, is contacted with a feed comprising oxygen at a catalyst temperature above 250 °C for a duration of up to 150 hours, and subsequently the catalyst temperature is decreased to a value of at most 250 °C.

As explained in the application text (page 7, line 28 – page 8, line 13), the present invention may specifically be applicable to epoxidation catalysts having a selectivity enhancing dopant (as defined) and having a relatively low silver density. Catalysts having a higher silver density are preferably not subjected to the treatment of the present invention (cf.

application text, page 4, lines 3-8). According to the present invention, the selectivity of a highly selective epoxidation catalyst, as claimed, can be improved by heat-treating the catalyst in the presence of oxygen at a temperature which is typically above the catalyst's normal initial operation temperature (cf. application text, page 3, lines 19-23).

The '135 reference teaches a method for decomposing silver compound to silver metal by heating an impregnated catalyst support to a temperature of 200-400 °C. *U.S. Pat. No. 4,007,135* at col. 5, ll. 6-27. The '135 reference is completely silent regarding improved catalyst selectivity from contacting a catalyst with oxygen at a catalyst temperature above 250 °C.

In the third full paragraph on page four of the Office Action, mailed August 18, 2005, the Examiner states:

“Hayden et al. do not specifically disclose a method for improving the selectivity of a catalyst”, as recited in the instant claims. However, because Hayden et al. disclose the same or similar method steps, conditions, and catalyst components as respectively claimed, it would have been obvious to one skilled in the art at the time the invention was made to reasonably expect that the method of Hayden et al. would result in improved catalyst selectivity, in view of the strong similarities between Hayden et al. and the claimed invention.”

The Examiner appears to be basing the § 103 rejection on inherency. “In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter.. 1990) (citations omitted) (emphasis added). *See also In re Robertson*, 169 F.3d 743, 745, 49 U.S.P.Q.2d 1949, 1950-51 (Fed. Cir. 1999) (quoting *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991) (“To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.”). “The mere fact that a certain thing

may result from a given set of circumstances is not sufficient [to establish inherency.]" *In re Rijckaert*, 9 F.3d 1531, 1534, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993) (quoting *In re Oelrich*, 666 F.2d 578, 581-82, 212 U.S.P.Q. 323, 326 (C.C.P.A. 1981) (emphasis in original)). "Inherency . . . may not be established by probabilities or possibilities." *In re Robertson*, 169 F.3d at 745, 49 U.S.P.Q.2d at 1951 (quoting *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991) (quoting *In re Oelrich*, 666 F.2d 578, 581, 212 U.S.P.Q. 323, 326 (C.C.P.A. 1981))).

The Examiner's reasoning, quoted above, does not reasonably support a determination that improved catalyst selectivity necessarily flows from the teachings of the '135 reference. The '135 reference discloses many possible promoters as well as wide ranges for silver loadings, support surface areas, and decomposition temperatures. *Id.* at col. 1, l. 20-41; col. 1, l. 55-56; col. 2, l. 16-31; col. 5, l. 17-27. Further, the examples of the '135 reference do not use rhenium, molybdenum or tungsten as promoters. Without more, the Examiner has at best proposed a mere possibility of what the '135 reference may inherently contain. Thus, the Examiner has not satisfied the burden of proof required support a theory of inherent disclosure.

Nevertheless, assuming arguendo that improved selectivity is inherently present in the method disclosed in the '135 reference, the Examiner still errs in her rejection since that which is inherent in the prior art, if not known at the time of the invention, cannot form a proper basis for rejecting the claimed invention as obvious under § 103. *See In re Shetty*, 566 F.2d 81, 86, 195 U.S.P.Q. 753, 756-57 (C.C.P.A. 1977). In particular, MPEP § 2141.02 states: "Obviousness cannot be predicated on what is not known at the time an invention is made, even if the inherency of a certain feature is later established." The Examiner recognizes that the '135 reference does not disclose improving the selectivity of a supported highly selective epoxidation catalyst, as claimed by the present invention. Nonetheless, the

Examiner still finds it would be obvious to one skilled in the art to expect the decomposition method of the '135 reference to result in improved catalyst selectivity. The Examiner makes this finding without providing any support for how one skilled in the art would be expected to necessarily know something that is not disclosed in the art at the time of the invention.

35 U.S.C. § 103 requires going back to the time of the invention and considering the thinking of one of ordinary skill in the art guided only by the prior art references and the then-accepted wisdom in the field. *See In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). Care must be taken not “to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.” *See Id.* (quoting *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983)). It appears the Examiner is using the teaching of the present invention for the basis of the rejection since the '135 reference does not disclose improving catalyst selectivity and no evidence is provided to support why one skilled in the art would necessarily know that which is not disclosed in the prior art.

In view of these arguments, Applicants believe that a *prima facie* basis for obviousness has not been established for Claims 1-25 and respectfully request that the rejection be withdrawn.

CONCLUSION

The rejection having been traversed, allowance of the claims of the present application is respectfully requested. If the Examiner would like to discuss this case with Applicants' attorney, the Examiner is invited to contact Richard Lemuth at the phone number below.

Respectfully submitted,

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